

# The Only OEM Certified L-39 Sustainment Solutions

With a proven track record in L-39 support and services, Aero is uniquely placed to deliver reliable, high-value sustainment solutions to the globally successful L-39 jet trainer aircraft. Through the implementation of Aero general overhaul, upgrade and modernizations programs, the L-39 aircraft will continue to successfully perform training and operational missions to its users for many years to come.

The general overhaul is literally giving new life to the L-39 aircraft. Aero uses the latest and unique know-how, documentation and overhaul methods to ensure a safe and reliable future operation. Since overhauled aircraft meet the same requirements as brand new aircraft coming of the line, Aero provides full warranty.

# Aero Recently Modernized L-39 Customer Fleets











# **Aero Expertise and Track Record**

3,000

Aero has completed more than 3,000 L-39 and L-59 jet training aircraft

45

L-39 operated in total by 45 military operators

5,000,000

Total flight log of the fleet exceeds 5,000,000 flight hours

**50** 

Service support for 50 years

## L-39 General Overhaul

#### The simplest way to extend in-service life

- Fuselage is completely stripped down of all parts and components
- Damage to airframe parts is repaired
- All aggregates are sent for overhaul to OEMs
- Consumable parts are replaced by new ones
- Fuselage fatigue critical parts are subject to NDT
- Execution of obligatory sustainment upgrades and bulletins
- Fuselage is painted internally and externally
- Aircraft is assembled and tested
- Final flight test confirming aircraft full functionality

## L-39 Modernization

#### Increase the operational value of your L-39 fleet

The Aero general overhaul and modernization package conforms to the same requirements as new aircraft coming off the production line, literally transforming legacy L-39 fleets into a brand-new like condition and enabling Aero to provide full

warranty after
delivery. Our latest
unique know-how,
documentation
and work procedures
utilize during these
programs ensure
effective, reliable
and safe operations
for many years to come.



# Key benefits of general overhauls performed Aero as the OEM, compared to unauthorized third parties:

- Fully compliant with design authority documentation and prescribed work procedures
- Full scale scope of work ensuring maximum reliability and safety of the aircraft
- All procedures and work processes performed in specialized premises, in line with proprietary manuals and by highly skilled workforce
- Full access to historical engineering know-how, expertise and experience built up over 50 years
- Full access to all service bulletins and obsolescence solutions

## Remotorization









FJ44-4M engine installed

Removal of FJ44-4M Williams engine and Genesys avionics from L-39CW to installation into brand new L-39NG airframe

New L-39NG airframe

## **Engine replacement**

- Replacement of **AI-25TL** by **Williams International FJ44-4M** engine with only simple fuselage modifications performed
- Maintenance cost reduction due to full electric starting with no Sapphire APU
- Static thrust 16,89 kN, acceleration time 3-5 sec
- Reduced weight means increased fuel efficiency and increased aircraft range
- Maintenance performed based on flight hours, meaning no general overhaul is needed.

## **FJ44-4M**

Engine main highlights

Max Thrust

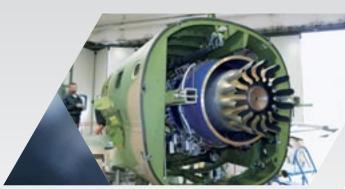
#### 16,87kN

Max Speed

#### **420 KTAS**

 Acceleration (idle to max)

5 seconds



# Modernized Cockpit

- Full glass cockpit solution
- 2 types of multi-function displays (MFD)
- Hands on throttle-and-stick (HOTAS)



# Increase the operational value of your L-39 fleet

### **Avionic Systems Upgrade**

**Option 1:** Standard overhaul (with possible GTN 650 upgrade)

**Option 2:** Option 1 + Genesys Avionics upgrade

Option 3: Option 2 + FJ44-4M engine

Thanks to its reliability, low operation cost, easy maintenance and deployment versatility, L-39 still provides excellent services to both military and civil operators all over the globe. To ensure the airworthiness of the L-39 aircraft despite increasing age and accumulated flight hours, new maintenance and overhaul methods are applied. Aero as the OEM therefore offers a comprehensive sustainment program for the L-39 type to enable it to satisfy its operators for further decades.



## **Included in Genesys Package**

**GPS Navigation System** 

• HUD/MFD/VOR/ILS/DME

#### **DME Device**

• Units in feet and knot

# Auto-Directional Finder (Option 1 only) Radio Station

VHF/UHF/COM

#### FDR System CARE-5

- Fully digital solution, increased number of recorded parameters
- Replacement of SARPP-12
- Simple download and debriefing

### **Main Removed/Replaced Systems**

- RSBN-5S navigation
- RKL-41 radio compass
- R832 radio station
- SPU-9 intercom
- SARPP-12 flight data recorder

### **Main Remaining Analogue Features**

(Option 2 only)

- Clock
- RPM indicator
- Egine gas temperature indicator (EGT)

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